

Laboratory Investigation Report

Name : Mr ARTEM KORLIAKOV
Age/Gender : 26 Y/M
MR No : MRN000000326142
Visit No : 6006OP000021222
Referring centre : Life Express Clinic Pearl
Referred By : Dr. Pooja Marianne Abraham
Doctor Name :

Order On: : 20-02-2025 14:14
Collected On: : 20-02-2025 14:14
Received On : 20/02/2025 16:27
Reported On : 20-02-2025 19:51
Lab ID No: : SER001740914



Laboratory

Test Description	Results	Units	Reference Range	Methodology
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ASSAY OF THYROID STIMULATING HORMONE TSH

TSH	7.6 H	μIU/mL	0.27-4.2 (Source for Adult range: Roche kit insert)	ECLIA
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Sample Type: SERUM

Clinical Interpretation:

- In pregnant woman, reference range :

PREGNANCY	REFERENCE RANGE for TSH in mIU /ml (As per American thyroid association)
1 st Trimester	0.10-2.50
2 nd Trimester	0.20-3.00
3 rd Trimester	0.30-3.00

- TSH levels are subject to circadian variation, reaching peak levels between 2-4 a.m. and at a minimum between 6-10 pm. The variation is of the order of 50%, hence time of the day has influence on the measured serum TSH concentrations.
- Recommended test for T3 and T4 is unbound fraction or free levels as it is metabolically active.
- Physiological rise in total T3/T4 levels in pregnancy and in patients on steroid therapy.

Clinical Use

- Primary Hypothyroidism • Hyperthyroidism • Hypothalamic- pituitary hypothyroidism • Inappropriate TSH secretion.
- Nonthyroidal illness. • Autoimmune thyroid disease. • Pregnancy associated thyroid disease.
- Thyroid dysfunction in infancy and early childhood.

25 HYDROXY INCLUDES FRACTIONS IF PERFORMED

Vitamin D, 25-OH (Total)) **13.2 L** ng/ml >30 ECLIA
 Source: Elecsys Vitamin D total III kit insert

Sample Type: SERUM

Clinical Interpretation:

LEVEL	REFERENCE RANGE in ng/ml	COMMENTS
Deficient	<20	High risk for developing Bone disease
Insufficient	21-29	Vitamin D concentration which normalizes PTH concentration
Sufficient	30-100	Optimal concentration for maximum health benefits
Potential intoxication	>100	High risk for toxic effects.

Comments:

Vitamin D promotes absorption of calcium and phosphorous and mineralization of bones and teeth. Deficiency in children causes Rickets and in adults leads to Osteomalacia. It can also lead to Hypocalcemia and tetany. Vitamin D status is best determined by measurement of 25 hydroxy vitamin D, as it is the major circulating form and has longer half life (2-3 weeks) than 1,25 Dihydroxy vitamin D(5-8 hrs).

Decreased levels

1. Inadequate exposure to sunlight.
2. Dietary deficiency
3. Vitamin D malabsorption
4. Severe hepatocellular disease
5. Drugs like anticonvulsants
6. Nephrotic syndrome.

Increased levels

Vitamin D intoxication.

ASSAY OF FREE THYROXINE

Thyroxine,Free (FT4) 20.7 pmol/L 11.97-21.88 ECLIA
 (Source for adult ranges: Roche kit insert)

Sample Type: SERUM

TRIIODOTHYRONINE, FREE (FT3) 4.4 pmol/L 3.1-6.8 ECLIA
 (Source for adult range: Roche kit insert)

Sample Type: SERUM

IRON PROFILE

Serum Iron 159 µg/dL 33-193 Colorimetric

Unsaturated Iron Binding Capacity (UIBC) 135 µg/dL 125 - 345 Ferrozine

Total Iron Binding Capacity (TIBC) 294 µg/dL 158 - 538 Calculation

Transferrin Saturation Index **54.08 H** % 15 - 50 Calculation

Sample Type: SERUM

Fathima Abdul Vahab
Lab Technologist
11601



Verified By:
Dr. Sunita Nain
M.D. PATHOLOGY
Specialist Clinical Pathology
DHA-P-62700059

----- END OF REPORT -----

IMPORTANT INSTRUCTIONS

• Above test results pertain to the sample received, results should be clinically correlated as all test results are dependent on multiple variables and the quantity of the sample received by the laboratory • Sample repeats are accepted on request of referring Physician within 5 days post reporting • Report delivery may be delayed due to unforeseen circumstances. Inconvenience is regretted • Certain tests required further testing at additional cost. Kindly submit request within 72hrs post reporting